BISR: Full report

Date: 2017-07-18

## Legend

* Cov(Slopes) = raw covariance
* Corr(Slopes)Est = correlation , ESTimated in Mplus
* CI(Slopes)Est = Confidence intervals estimated in Mplus
* Corr(Slopes)Comp = correlation, computed outside of Mplus using Fisher's transform

Note: cases in which restricted (co)variances or insufficient decimals prevent the computation of correlations are marked by ---

**Raw covariance** and **estimated correlations** are reported in the form : **est(se) pval star**,where  
- est is the covariance estimate on the original metric  
- se is the standard error on the original metric  
- pval is the p-value associated with the raw covariance  
- star is significance indicator associated with corresponding covariance estimate, with ., \*, \*\*, and \*\*\* indicating significance at .10, .05, .01, and .001 alpha levels, respectively

**Confidence intervals** for estimated correlations are reported in the form: **(low,high)**,where  
- low - bottom boundry of the 95% confidence interval - high - top boundry of the 95% confidence interval

**Computed correlations** are reported in the form: **est(low, high)**, where  
- est is the correlation coefficient computed from raw (co)variances using Fisher transfrom  
- low and high are the 95% confidence intervals associated with the computed correlations

# Group by domain

## male

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | process\_a | process\_b |  | Cov(Levels) | Corr(Levels)Est | CI(Levels)Est | Corr(Levels)Comp | Cov(Slopes) | Corr(Slopes)Est | CI(Slopes)Est | Corr(Slopes)Comp | Cov(Residuals) | Corr(Residuals)Est | CI(Residuals)Est | Corr(Residuals)Comp |
| gait-grip | eas | grip | gait | 72 | 23.89(37.41), =.52 | .32( .45), =.48 | (-.57,1.20) | .32( .09, .51) | .18(2.28), =.94 | .24(2.86), =.93 | (-5.36,5.85) | .24( .01, .45) | 7.76(10.60), =.46 | .21( .25), =.39 | (-.28, .71) | .21(-.02, .43) |
| gait-grip | hrs | grip | gait | 3034 | .23( .05), <.01 \*\*\* | .22( .05), <.01 \*\*\* | ( .12, .31) | .22( .18, .25) | .00( .00), =.30 | .30( .30), =.32 | (-.29, .89) | --- | .05( .03), =.07 . | .06( .04), =.07 . | (-.01, .14) | .07( .03, .10) |
| gait-grip | ilse | grip | tug | 252 | 2.92(3.48), =.40 | .29( .43), =.51 | (-.56,1.14) | .29( .17, .40) | .07( .08), =.33 | .84(1.24), =.50 | (-1.59,3.26) | .86( .82, .89) | -4.96(1.95), =.01 \* | -.28( .10), =.01 \*\* | (-.47,-.08) | -.28(-.39,-.16) |
| gait-grip | lasa | grip | gait | 800 | -5.54(1.37), <.01 \*\*\* | -.35( .08), <.01 \*\*\* | (-.51,-.19) | -.35(-.41,-.29) | -.10( .04), =.01 \*\* | -.76( .19), <.01 \*\*\* | (-1.13,-.38) | -.76(-.78,-.72) | -.49( .55), =.37 | -.04( .04), =.37 | (-.11, .04) | -.03(-.10, .03) |
| gait-grip | map | gait | grip | 309 | .60( .17), <.01 \*\*\* | .30( .08), <.01 \*\*\* | ( .15, .46) | .30( .20, .40) | .01( .01), =.25 | .40( .34), =.24 | (-.27,1.06) | --- | .00( .05), =.92 | .01( .06), =.92 | (-.11, .12) | .01(-.11, .12) |
| gait-grip | nuage | grip | gait | 847 | -1.87( .73), =.01 \*\* | -.20( .06), <.01 \*\*\* | (-.31,-.09) | -.20(-.26,-.13) | -.07( .04), =.11 | -.24( .28), =.39 | (-.80, .31) | -.25(-.31,-.18) | -.23( .10), =.02 \* | -.05( .02), =.04 \* | (-.10,-.00) | -.05(-.12, .01) |
| gait-grip | nuage | grip | tug | 847 | -5.71(1.35), <.01 \*\*\* | -.25( .05), <.01 \*\*\* | (-.35,-.15) | -.25(-.31,-.19) | -.20( .10), =.05 . | -.24( .12), =.05 \* | (-.47,-.00) | -.24(-.30,-.17) | -.36( .20), =.07 . | -.04( .02), =.05 . | (-.09, .00) | -.04(-.11, .03) |
| gait-grip | octo | grip | gait | 138 | -1.57( .98), =.11 | -.35( .19), =.07 . | (-.72, .03) | -.35(-.49,-.19) | -.04( .04), =.22 | -.70( .53), =.19 | (-1.74, .34) | -.70(-.78,-.60) | -.39( .25), =.13 | -.13( .08), =.11 | (-.28, .03) | -.13(-.29, .04) |
| gait-grip | satsa | gait | grip | 265 | -2.81(2.50), =.26 | -.51( .49), =.30 | (-1.46, .45) | -.51(-.59,-.41) | -.02( .02), =.39 | -.42( .46), =.37 | (-1.32, .49) | -.41(-.51,-.31) | -.32( .97), =.74 | -.02( .07), =.74 | (-.17, .12) | -.02(-.14, .10) |
| pulmonary-gait | eas | pef | gait | 72 | -64.30(734.65), =.93 | -.04( .44), =.93 | (-.91, .83) | -.04(-.27, .19) | -7.98(29.04), =.78 | -.45(1.86), =.81 | (-4.09,3.19) | -.45(-.62,-.24) | 101.38(125.95), =.42 | .18( .21), =.40 | (-.24, .60) | .18(-.05, .40) |
| pulmonary-gait | elsa | fev100 | gait | 1828 | 2.31( .43), <.01 \*\*\* | .22( .04), <.01 \*\*\* | ( .14, .29) | .22( .17, .26) | .01( .01), =.26 | .19( .17), =.26 | (-.14, .53) | --- | .11( .18), =.56 | .02( .03), =.56 | (-.04, .07) | .02(-.03, .06) |
| pulmonary-gait | hrs | pef | gait | 3034 | 4.54( .71), <.01 \*\*\* | .27( .04), <.01 \*\*\* | ( .19, .35) | .27( .24, .30) | .00( .01), =.75 | .10( .32), =.75 | (-.52, .72) | --- | 1.06( .32), <.01 \*\*\* | .10( .03), <.01 \*\*\* | ( .04, .16) | .10( .06, .13) |
| pulmonary-gait | lasa | pef | gait | 800 | -40.60(5.66), <.01 \*\*\* | -.36( .06), <.01 \*\*\* | (-.48,-.23) | -.36(-.42,-.29) | -.78( .33), =.02 \* | -.40( .09), <.01 \*\*\* | (-.59,-.22) | -.40(-.46,-.34) | -4.31(4.73), =.36 | -.03( .03), =.37 | (-.09, .03) | -.03(-.10, .04) |
| pulmonary-gait | map | fev | gait | 309 | .02( .01), =.01 \*\* | .25( .08), <.01 \*\* | ( .08, .41) | .24( .13, .34) | .00( .00), =.39 | -.46( .62), =.45 | (-1.68, .75) | --- | .00( .00), =.90 | -.01( .05), =.90 | (-.10, .08) | .00(-.11, .11) |
| pulmonary-gait | octo | pef | gait | 132 | -70.87(37.27), =.06 . | -.38( .20), =.06 . | (-.77, .02) | -.38(-.51,-.22) | -1.34(1.95), =.49 | -.79(1.10), =.47 | (-2.95,1.37) | -.79(-.85,-.72) | -6.48(18.41), =.72 | -.05( .13), =.72 | (-.30, .21) | -.05(-.21, .13) |
| pulmonary-gait | satsa | gait | fev | 265 | -.06( .20), =.76 | -.10( .34), =.76 | (-.77, .56) | -.10(-.22, .02) | -.00( .00), =.40 | -.55( .62), =.38 | (-1.77, .67) | --- | .04( .05), =.48 | .05( .07), =.48 | (-.09, .19) | .05(-.07, .17) |
| pulmonary-grip | eas | pef | grip | 72 | 24.83(258.35), =.92 | .04( .45), =.92 | (-.84, .93) | .04(-.19, .27) | 1.16(32.16), =.97 | .08(2.22), =.97 | (-4.26,4.43) | .08(-.15, .31) | 65.69(48.29), =.17 | .24( .17), =.15 | (-.09, .57) | .24( .01, .45) |
| pulmonary-grip | elsa | grip | fev100 | 2872 | 62.13(10.87), <.01 \*\*\* | .18( .03), <.01 \*\*\* | ( .12, .24) | .18( .14, .22) | .19( .13), =.14 | .30( .22), =.17 | (-.13, .74) | .30( .27, .33) | 3.71(5.10), =.47 | .02( .03), =.46 | (-.03, .07) | .02(-.02, .06) |
| pulmonary-grip | hrs | grip | pef | 3034 | 252.65(17.89), <.01 \*\*\* | .38( .02), <.01 \*\*\* | ( .33, .42) | .38( .35, .41) | .61( .31), =.05 \* | .34( .17), =.05 \* | ( .01, .66) | .33( .30, .37) | 18.40(6.45), <.01 \*\* | .07( .03), <.01 \*\* | ( .02, .13) | .08( .04, .11) |
| pulmonary-grip | lasa | grip | pef | 800 | 153.76(29.38), <.01 \*\*\* | .24( .04), <.01 \*\*\* | ( .16, .32) | .24( .17, .30) | .29( .10), <.01 \*\* | .57( .10), <.01 \*\*\* | ( .38, .75) | .58( .53, .62) | -12.42(7.99), =.12 | -.05( .03), =.11 | (-.12, .01) | -.05(-.12, .02) |
| pulmonary-grip | map | fev | grip | 309 | 1.79( .50), <.01 \*\*\* | .25( .06), <.01 \*\*\* | ( .12, .37) | .25( .14, .35) | -.00( .03), =.91 | -.04( .40), =.91 | (-.83, .74) | -.05(-.16, .06) | -.02( .06), =.78 | -.01( .05), =.78 | (-.11, .08) | -.01(-.13, .10) |
| pulmonary-grip | octo | grip | pef | 138 | 28.29(25.48), =.27 | .15( .13), =.25 | (-.11, .40) | .15(-.02, .31) | .10( .89), =.91 | .10( .91), =.91 | (-1.69,1.89) | .10(-.07, .26) | 10.21(6.70), =.13 | .14( .09), =.12 | (-.04, .32) | .14(-.03, .30) |
| pulmonary-grip | satsa | grip | fev | 299 | .64( .33), =.05 . | .21( .10), =.04 \* | ( .01, .40) | .21( .10, .31) | .00( .00), =.14 | .74( .45), =.10 . | (-.13,1.62) | --- | .28( .08), <.01 \*\*\* | .15( .04), <.01 \*\*\* | ( .07, .24) | .16( .04, .26) |

## female

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | process\_a | process\_b |  | Cov(Levels) | Corr(Levels)Est | CI(Levels)Est | Corr(Levels)Comp | Cov(Slopes) | Corr(Slopes)Est | CI(Slopes)Est | Corr(Slopes)Comp | Cov(Residuals) | Corr(Residuals)Est | CI(Residuals)Est | Corr(Residuals)Comp |
| gait-grip | eas | grip | gait | 147 | 16.31(16.92), =.34 | .17( .17), =.31 | (-.17, .52) | .18( .01, .33) | .46( .74), =.53 | .38( .50), =.44 | (-.59,1.36) | .38( .23, .51) | .51(1.84), =.78 | .03( .10), =.78 | (-.17, .22) | .03(-.14, .19) |
| gait-grip | hrs | grip | gait | 4208 | .17( .03), <.01 \*\*\* | .26( .04), <.01 \*\*\* | ( .18, .34) | .26( .23, .28) | .00( .00), =.82 | -.05( .21), =.82 | (-.46, .36) | --- | .05( .01), <.01 \*\*\* | .10( .02), <.01 \*\*\* | ( .05, .15) | .10( .07, .13) |
| gait-grip | ilse | grip | tug | 224 | -1.39(5.52), =.80 | -.06( .23), =.80 | (-.51, .39) | -.06(-.19, .07) | .04( .14), =.80 | .40(1.63), =.80 | (-2.79,3.60) | .35( .23, .46) | 1.68(2.37), =.48 | .10( .14), =.47 | (-.17, .37) | .10(-.03, .23) |
| gait-grip | lasa | grip | gait | 782 | -3.91(1.27), <.01 \*\* | -.34( .07), <.01 \*\*\* | (-.48,-.19) | -.34(-.40,-.27) | -.02( .02), =.31 | -.68(1.60), =.67 | (-3.83,2.46) | -.67(-.70,-.63) | .09( .40), =.82 | .01( .03), =.82 | (-.05, .06) | .01(-.06, .08) |
| gait-grip | map | gait | grip | 931 | .41( .07), <.01 \*\*\* | .30( .05), <.01 \*\*\* | ( .21, .40) | .30( .24, .36) | -.01( .01), =.17 | -.46( .31), =.15 | (-1.07, .16) | -.37(-.42,-.31) | -.00( .02), =.81 | -.01( .03), =.81 | (-.07, .05) | -.01(-.07, .06) |
| gait-grip | nuage | grip | gait | 934 | -1.75( .40), <.01 \*\*\* | -.18( .04), <.01 \*\*\* | (-.27,-.10) | -.18(-.25,-.12) | -.04( .04), =.37 | -.10( .12), =.37 | (-.33, .12) | -.10(-.17,-.04) | -.13( .09), =.15 | -.04( .03), =.15 | (-.10, .02) | -.04(-.11, .02) |
| gait-grip | nuage | grip | tug | 934 | -7.37(1.16), <.01 \*\*\* | -.27( .04), <.01 \*\*\* | (-.35,-.19) | -.27(-.33,-.21) | -.17( .12), =.14 | -.26( .17), =.13 | (-.59, .07) | -.26(-.32,-.20) | -.10( .24), =.67 | -.01( .03), =.67 | (-.07, .04) | -.01(-.08, .05) |
| gait-grip | octo | grip | gait | 270 | -2.08( .95), =.03 \* | -.33( .14), =.02 \* | (-.61,-.05) | -.33(-.43,-.22) | -.01( .05), =.91 | -.04( .40), =.91 | (-.82, .74) | -.05(-.16, .07) | -.17( .25), =.50 | -.04( .07), =.50 | (-.18, .09) | -.05(-.16, .07) |
| gait-grip | satsa | gait | grip | 366 | -1.06(2.67), =.69 | -.16( .42), =.69 | (-.99, .66) | -.16(-.26,-.06) | -.00( .02), =.96 | -.03( .59), =.96 | (-1.18,1.12) | -.03(-.13, .08) | -.08( .71), =.91 | -.01( .05), =.91 | (-.11, .09) | -.01(-.11, .10) |
| pulmonary-gait | eas | pef | gait | 150 | 67.25(237.19), =.78 | .05( .19), =.78 | (-.31, .42) | .05(-.11, .21) | -10.98(12.32), =.37 | -.55( .52), =.28 | (-1.57, .46) | -.55(-.66,-.43) | 29.78(37.80), =.43 | .10( .12), =.44 | (-.14, .33) | .09(-.07, .25) |
| pulmonary-gait | elsa | fev100 | gait | 2018 | 1.79( .26), <.01 \*\*\* | .26( .03), <.01 \*\*\* | ( .19, .32) | .26( .22, .30) | .01( .00), =.04 \* | .57( .10), <.01 \*\*\* | ( .38, .75) | --- | -.11( .13), =.39 | -.03( .03), =.40 | (-.09, .04) | -.03(-.07, .02) |
| pulmonary-gait | hrs | pef | gait | 4208 | 3.38( .39), <.01 \*\*\* | .34( .04), <.01 \*\*\* | ( .26, .41) | .33( .30, .36) | -.01( .01), =.27 | -.23( .21), =.27 | (-.65, .18) | --- | .92( .17), <.01 \*\*\* | .13( .02), <.01 \*\*\* | ( .08, .18) | .13( .10, .16) |
| pulmonary-gait | lasa | pef | gait | 782 | -19.83(9.76), =.04 \* | -.23( .13), =.09 . | (-.49, .03) | -.23(-.29,-.16) | -.16( .13), =.24 | -.25( .20), =.21 | (-.64, .14) | -.25(-.31,-.18) | -3.88(4.68), =.41 | -.02( .03), =.40 | (-.08, .03) | -.02(-.09, .05) |
| pulmonary-gait | map | fev | gait | 931 | .01( .00), <.01 \*\*\* | .24( .05), <.01 \*\*\* | ( .15, .34) | .24( .18, .30) | .00( .00), =.94 | -.03( .39), =.94 | (-.79, .73) | --- | .00( .00), =.58 | .02( .03), =.57 | (-.04, .07) | .00(-.06, .06) |
| pulmonary-gait | octo | pef | gait | 263 | -79.93(42.16), =.06 . | -.35( .17), =.04 \* | (-.69,-.02) | -.35(-.46,-.24) | -3.79(3.35), =.26 | -.58( .40), =.15 | (-1.37, .21) | -.58(-.66,-.50) | -3.43(14.41), =.81 | -.02( .09), =.81 | (-.21, .16) | -.02(-.14, .10) |
| pulmonary-gait | satsa | gait | fev | 366 | -.24( .16), =.12 | -.38( .23), =.10 | (-.83, .08) | -.38(-.46,-.28) | -.00( .00), =.34 | -.38( .36), =.30 | (-1.08, .33) | --- | -.03( .04), =.46 | -.04( .06), =.46 | (-.16, .07) | -.04(-.14, .06) |
| pulmonary-grip | eas | pef | grip | 150 | 98.73(59.72), =.10 . | .29( .15), =.05 . | (-.00, .58) | .29( .13, .43) | .12(2.96), =.97 | .03( .80), =.97 | (-1.54,1.61) | .03(-.13, .19) | 11.15(9.83), =.26 | .11( .10), =.26 | (-.08, .31) | .11(-.05, .27) |
| pulmonary-grip | elsa | grip | fev100 | 3145 | 36.41(5.04), <.01 \*\*\* | .23( .03), <.01 \*\*\* | ( .17, .29) | .23( .20, .27) | .08( .07), =.24 | .55( .84), =.51 | (-1.09,2.19) | .55( .53, .57) | 1.45(2.35), =.54 | .02( .02), =.54 | (-.03, .06) | .02(-.02, .05) |
| pulmonary-grip | hrs | grip | pef | 4208 | 89.96(6.42), <.01 \*\*\* | .33( .02), <.01 \*\*\* | ( .28, .37) | .33( .30, .35) | .45( .13), <.01 \*\*\* | .58( .17), <.01 \*\*\* | ( .25, .91) | .58( .56, .60) | 7.25(2.38), <.01 \*\* | .06( .02), <.01 \*\* | ( .02, .10) | .06( .03, .09) |
| pulmonary-grip | lasa | grip | pef | 782 | 76.86(19.88), <.01 \*\*\* | .30( .07), <.01 \*\*\* | ( .16, .43) | .30( .23, .36) | .00( .22), =.99 | .03(1.49), =.98 | (-2.89,2.96) | .03(-.04, .10) | 5.73(7.32), =.43 | .03( .04), =.43 | (-.05, .12) | .03(-.04, .10) |
| pulmonary-grip | map | fev | grip | 931 | .41( .13), <.01 \*\* | .13( .04), <.01 \*\* | ( .05, .21) | .13( .06, .19) | .00( .01), =.66 | .16( .37), =.66 | (-.56, .88) | --- | .01( .02), =.53 | .02( .03), =.53 | (-.04, .09) | .02(-.04, .08) |
| pulmonary-grip | octo | grip | pef | 270 | 44.94(13.12), <.01 \*\*\* | .39( .10), <.01 \*\*\* | ( .19, .58) | .39( .28, .48) | .23( .27), =.40 | .34( .40), =.39 | (-.44,1.13) | .34( .23, .44) | 1.29(3.13), =.68 | .02( .06), =.68 | (-.09, .14) | .02(-.09, .14) |
| pulmonary-grip | satsa | grip | fev | 408 | .06( .12), =.59 | .06( .11), =.58 | (-.15, .27) | .06(-.04, .15) | .00( .00), =.94 | .03( .35), =.94 | (-.67, .72) | --- | .17( .04), <.01 \*\*\* | .15( .04), <.01 \*\*\* | ( .08, .23) | .15( .06, .25) |

# Grouped by study

## male

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | process\_a | process\_b |  | Cov(Levels) | Corr(Levels)Est | CI(Levels)Est | Corr(Levels)Comp | Cov(Slopes) | Corr(Slopes)Est | CI(Slopes)Est | Corr(Slopes)Comp | Cov(Residuals) | Corr(Residuals)Est | CI(Residuals)Est | Corr(Residuals)Comp |
| gait-grip | eas | grip | gait | 72 | 23.89(37.41), =.52 | .32( .45), =.48 | (-.57,1.20) | .32( .09, .51) | .18(2.28), =.94 | .24(2.86), =.93 | (-5.36,5.85) | .24( .01, .45) | 7.76(10.60), =.46 | .21( .25), =.39 | (-.28, .71) | .21(-.02, .43) |
| pulmonary-gait | eas | pef | gait | 72 | -64.30(734.65), =.93 | -.04( .44), =.93 | (-.91, .83) | -.04(-.27, .19) | -7.98(29.04), =.78 | -.45(1.86), =.81 | (-4.09,3.19) | -.45(-.62,-.24) | 101.38(125.95), =.42 | .18( .21), =.40 | (-.24, .60) | .18(-.05, .40) |
| pulmonary-grip | eas | pef | grip | 72 | 24.83(258.35), =.92 | .04( .45), =.92 | (-.84, .93) | .04(-.19, .27) | 1.16(32.16), =.97 | .08(2.22), =.97 | (-4.26,4.43) | .08(-.15, .31) | 65.69(48.29), =.17 | .24( .17), =.15 | (-.09, .57) | .24( .01, .45) |
| pulmonary-gait | elsa | fev100 | gait | 1828 | 2.31( .43), <.01 \*\*\* | .22( .04), <.01 \*\*\* | ( .14, .29) | .22( .17, .26) | .01( .01), =.26 | .19( .17), =.26 | (-.14, .53) | --- | .11( .18), =.56 | .02( .03), =.56 | (-.04, .07) | .02(-.03, .06) |
| pulmonary-grip | elsa | grip | fev100 | 2872 | 62.13(10.87), <.01 \*\*\* | .18( .03), <.01 \*\*\* | ( .12, .24) | .18( .14, .22) | .19( .13), =.14 | .30( .22), =.17 | (-.13, .74) | .30( .27, .33) | 3.71(5.10), =.47 | .02( .03), =.46 | (-.03, .07) | .02(-.02, .06) |
| gait-grip | hrs | grip | gait | 3034 | .23( .05), <.01 \*\*\* | .22( .05), <.01 \*\*\* | ( .12, .31) | .22( .18, .25) | .00( .00), =.30 | .30( .30), =.32 | (-.29, .89) | --- | .05( .03), =.07 . | .06( .04), =.07 . | (-.01, .14) | .07( .03, .10) |
| pulmonary-gait | hrs | pef | gait | 3034 | 4.54( .71), <.01 \*\*\* | .27( .04), <.01 \*\*\* | ( .19, .35) | .27( .24, .30) | .00( .01), =.75 | .10( .32), =.75 | (-.52, .72) | --- | 1.06( .32), <.01 \*\*\* | .10( .03), <.01 \*\*\* | ( .04, .16) | .10( .06, .13) |
| pulmonary-grip | hrs | grip | pef | 3034 | 252.65(17.89), <.01 \*\*\* | .38( .02), <.01 \*\*\* | ( .33, .42) | .38( .35, .41) | .61( .31), =.05 \* | .34( .17), =.05 \* | ( .01, .66) | .33( .30, .37) | 18.40(6.45), <.01 \*\* | .07( .03), <.01 \*\* | ( .02, .13) | .08( .04, .11) |
| gait-grip | ilse | grip | tug | 252 | 2.92(3.48), =.40 | .29( .43), =.51 | (-.56,1.14) | .29( .17, .40) | .07( .08), =.33 | .84(1.24), =.50 | (-1.59,3.26) | .86( .82, .89) | -4.96(1.95), =.01 \* | -.28( .10), =.01 \*\* | (-.47,-.08) | -.28(-.39,-.16) |
| gait-grip | lasa | grip | gait | 800 | -5.54(1.37), <.01 \*\*\* | -.35( .08), <.01 \*\*\* | (-.51,-.19) | -.35(-.41,-.29) | -.10( .04), =.01 \*\* | -.76( .19), <.01 \*\*\* | (-1.13,-.38) | -.76(-.78,-.72) | -.49( .55), =.37 | -.04( .04), =.37 | (-.11, .04) | -.03(-.10, .03) |
| pulmonary-gait | lasa | pef | gait | 800 | -40.60(5.66), <.01 \*\*\* | -.36( .06), <.01 \*\*\* | (-.48,-.23) | -.36(-.42,-.29) | -.78( .33), =.02 \* | -.40( .09), <.01 \*\*\* | (-.59,-.22) | -.40(-.46,-.34) | -4.31(4.73), =.36 | -.03( .03), =.37 | (-.09, .03) | -.03(-.10, .04) |
| pulmonary-grip | lasa | grip | pef | 800 | 153.76(29.38), <.01 \*\*\* | .24( .04), <.01 \*\*\* | ( .16, .32) | .24( .17, .30) | .29( .10), <.01 \*\* | .57( .10), <.01 \*\*\* | ( .38, .75) | .58( .53, .62) | -12.42(7.99), =.12 | -.05( .03), =.11 | (-.12, .01) | -.05(-.12, .02) |
| gait-grip | map | gait | grip | 309 | .60( .17), <.01 \*\*\* | .30( .08), <.01 \*\*\* | ( .15, .46) | .30( .20, .40) | .01( .01), =.25 | .40( .34), =.24 | (-.27,1.06) | --- | .00( .05), =.92 | .01( .06), =.92 | (-.11, .12) | .01(-.11, .12) |
| pulmonary-gait | map | fev | gait | 309 | .02( .01), =.01 \*\* | .25( .08), <.01 \*\* | ( .08, .41) | .24( .13, .34) | .00( .00), =.39 | -.46( .62), =.45 | (-1.68, .75) | --- | .00( .00), =.90 | -.01( .05), =.90 | (-.10, .08) | .00(-.11, .11) |
| pulmonary-grip | map | fev | grip | 309 | 1.79( .50), <.01 \*\*\* | .25( .06), <.01 \*\*\* | ( .12, .37) | .25( .14, .35) | -.00( .03), =.91 | -.04( .40), =.91 | (-.83, .74) | -.05(-.16, .06) | -.02( .06), =.78 | -.01( .05), =.78 | (-.11, .08) | -.01(-.13, .10) |
| gait-grip | nuage | grip | gait | 847 | -1.87( .73), =.01 \*\* | -.20( .06), <.01 \*\*\* | (-.31,-.09) | -.20(-.26,-.13) | -.07( .04), =.11 | -.24( .28), =.39 | (-.80, .31) | -.25(-.31,-.18) | -.23( .10), =.02 \* | -.05( .02), =.04 \* | (-.10,-.00) | -.05(-.12, .01) |
| gait-grip | nuage | grip | tug | 847 | -5.71(1.35), <.01 \*\*\* | -.25( .05), <.01 \*\*\* | (-.35,-.15) | -.25(-.31,-.19) | -.20( .10), =.05 . | -.24( .12), =.05 \* | (-.47,-.00) | -.24(-.30,-.17) | -.36( .20), =.07 . | -.04( .02), =.05 . | (-.09, .00) | -.04(-.11, .03) |
| gait-grip | octo | grip | gait | 138 | -1.57( .98), =.11 | -.35( .19), =.07 . | (-.72, .03) | -.35(-.49,-.19) | -.04( .04), =.22 | -.70( .53), =.19 | (-1.74, .34) | -.70(-.78,-.60) | -.39( .25), =.13 | -.13( .08), =.11 | (-.28, .03) | -.13(-.29, .04) |
| pulmonary-gait | octo | pef | gait | 132 | -70.87(37.27), =.06 . | -.38( .20), =.06 . | (-.77, .02) | -.38(-.51,-.22) | -1.34(1.95), =.49 | -.79(1.10), =.47 | (-2.95,1.37) | -.79(-.85,-.72) | -6.48(18.41), =.72 | -.05( .13), =.72 | (-.30, .21) | -.05(-.21, .13) |
| pulmonary-grip | octo | grip | pef | 138 | 28.29(25.48), =.27 | .15( .13), =.25 | (-.11, .40) | .15(-.02, .31) | .10( .89), =.91 | .10( .91), =.91 | (-1.69,1.89) | .10(-.07, .26) | 10.21(6.70), =.13 | .14( .09), =.12 | (-.04, .32) | .14(-.03, .30) |
| gait-grip | satsa | gait | grip | 265 | -2.81(2.50), =.26 | -.51( .49), =.30 | (-1.46, .45) | -.51(-.59,-.41) | -.02( .02), =.39 | -.42( .46), =.37 | (-1.32, .49) | -.41(-.51,-.31) | -.32( .97), =.74 | -.02( .07), =.74 | (-.17, .12) | -.02(-.14, .10) |
| pulmonary-gait | satsa | gait | fev | 265 | -.06( .20), =.76 | -.10( .34), =.76 | (-.77, .56) | -.10(-.22, .02) | -.00( .00), =.40 | -.55( .62), =.38 | (-1.77, .67) | --- | .04( .05), =.48 | .05( .07), =.48 | (-.09, .19) | .05(-.07, .17) |
| pulmonary-grip | satsa | grip | fev | 299 | .64( .33), =.05 . | .21( .10), =.04 \* | ( .01, .40) | .21( .10, .31) | .00( .00), =.14 | .74( .45), =.10 . | (-.13,1.62) | --- | .28( .08), <.01 \*\*\* | .15( .04), <.01 \*\*\* | ( .07, .24) | .16( .04, .26) |

## female

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| domain | study | process\_a | process\_b |  | Cov(Levels) | Corr(Levels)Est | CI(Levels)Est | Corr(Levels)Comp | Cov(Slopes) | Corr(Slopes)Est | CI(Slopes)Est | Corr(Slopes)Comp | Cov(Residuals) | Corr(Residuals)Est | CI(Residuals)Est | Corr(Residuals)Comp |
| gait-grip | eas | grip | gait | 147 | 16.31(16.92), =.34 | .17( .17), =.31 | (-.17, .52) | .18( .01, .33) | .46( .74), =.53 | .38( .50), =.44 | (-.59,1.36) | .38( .23, .51) | .51(1.84), =.78 | .03( .10), =.78 | (-.17, .22) | .03(-.14, .19) |
| pulmonary-gait | eas | pef | gait | 150 | 67.25(237.19), =.78 | .05( .19), =.78 | (-.31, .42) | .05(-.11, .21) | -10.98(12.32), =.37 | -.55( .52), =.28 | (-1.57, .46) | -.55(-.66,-.43) | 29.78(37.80), =.43 | .10( .12), =.44 | (-.14, .33) | .09(-.07, .25) |
| pulmonary-grip | eas | pef | grip | 150 | 98.73(59.72), =.10 . | .29( .15), =.05 . | (-.00, .58) | .29( .13, .43) | .12(2.96), =.97 | .03( .80), =.97 | (-1.54,1.61) | .03(-.13, .19) | 11.15(9.83), =.26 | .11( .10), =.26 | (-.08, .31) | .11(-.05, .27) |
| pulmonary-gait | elsa | fev100 | gait | 2018 | 1.79( .26), <.01 \*\*\* | .26( .03), <.01 \*\*\* | ( .19, .32) | .26( .22, .30) | .01( .00), =.04 \* | .57( .10), <.01 \*\*\* | ( .38, .75) | --- | -.11( .13), =.39 | -.03( .03), =.40 | (-.09, .04) | -.03(-.07, .02) |
| pulmonary-grip | elsa | grip | fev100 | 3145 | 36.41(5.04), <.01 \*\*\* | .23( .03), <.01 \*\*\* | ( .17, .29) | .23( .20, .27) | .08( .07), =.24 | .55( .84), =.51 | (-1.09,2.19) | .55( .53, .57) | 1.45(2.35), =.54 | .02( .02), =.54 | (-.03, .06) | .02(-.02, .05) |
| gait-grip | hrs | grip | gait | 4208 | .17( .03), <.01 \*\*\* | .26( .04), <.01 \*\*\* | ( .18, .34) | .26( .23, .28) | .00( .00), =.82 | -.05( .21), =.82 | (-.46, .36) | --- | .05( .01), <.01 \*\*\* | .10( .02), <.01 \*\*\* | ( .05, .15) | .10( .07, .13) |
| pulmonary-gait | hrs | pef | gait | 4208 | 3.38( .39), <.01 \*\*\* | .34( .04), <.01 \*\*\* | ( .26, .41) | .33( .30, .36) | -.01( .01), =.27 | -.23( .21), =.27 | (-.65, .18) | --- | .92( .17), <.01 \*\*\* | .13( .02), <.01 \*\*\* | ( .08, .18) | .13( .10, .16) |
| pulmonary-grip | hrs | grip | pef | 4208 | 89.96(6.42), <.01 \*\*\* | .33( .02), <.01 \*\*\* | ( .28, .37) | .33( .30, .35) | .45( .13), <.01 \*\*\* | .58( .17), <.01 \*\*\* | ( .25, .91) | .58( .56, .60) | 7.25(2.38), <.01 \*\* | .06( .02), <.01 \*\* | ( .02, .10) | .06( .03, .09) |
| gait-grip | ilse | grip | tug | 224 | -1.39(5.52), =.80 | -.06( .23), =.80 | (-.51, .39) | -.06(-.19, .07) | .04( .14), =.80 | .40(1.63), =.80 | (-2.79,3.60) | .35( .23, .46) | 1.68(2.37), =.48 | .10( .14), =.47 | (-.17, .37) | .10(-.03, .23) |
| gait-grip | lasa | grip | gait | 782 | -3.91(1.27), <.01 \*\* | -.34( .07), <.01 \*\*\* | (-.48,-.19) | -.34(-.40,-.27) | -.02( .02), =.31 | -.68(1.60), =.67 | (-3.83,2.46) | -.67(-.70,-.63) | .09( .40), =.82 | .01( .03), =.82 | (-.05, .06) | .01(-.06, .08) |
| pulmonary-gait | lasa | pef | gait | 782 | -19.83(9.76), =.04 \* | -.23( .13), =.09 . | (-.49, .03) | -.23(-.29,-.16) | -.16( .13), =.24 | -.25( .20), =.21 | (-.64, .14) | -.25(-.31,-.18) | -3.88(4.68), =.41 | -.02( .03), =.40 | (-.08, .03) | -.02(-.09, .05) |
| pulmonary-grip | lasa | grip | pef | 782 | 76.86(19.88), <.01 \*\*\* | .30( .07), <.01 \*\*\* | ( .16, .43) | .30( .23, .36) | .00( .22), =.99 | .03(1.49), =.98 | (-2.89,2.96) | .03(-.04, .10) | 5.73(7.32), =.43 | .03( .04), =.43 | (-.05, .12) | .03(-.04, .10) |
| gait-grip | map | gait | grip | 931 | .41( .07), <.01 \*\*\* | .30( .05), <.01 \*\*\* | ( .21, .40) | .30( .24, .36) | -.01( .01), =.17 | -.46( .31), =.15 | (-1.07, .16) | -.37(-.42,-.31) | -.00( .02), =.81 | -.01( .03), =.81 | (-.07, .05) | -.01(-.07, .06) |
| pulmonary-gait | map | fev | gait | 931 | .01( .00), <.01 \*\*\* | .24( .05), <.01 \*\*\* | ( .15, .34) | .24( .18, .30) | .00( .00), =.94 | -.03( .39), =.94 | (-.79, .73) | --- | .00( .00), =.58 | .02( .03), =.57 | (-.04, .07) | .00(-.06, .06) |
| pulmonary-grip | map | fev | grip | 931 | .41( .13), <.01 \*\* | .13( .04), <.01 \*\* | ( .05, .21) | .13( .06, .19) | .00( .01), =.66 | .16( .37), =.66 | (-.56, .88) | --- | .01( .02), =.53 | .02( .03), =.53 | (-.04, .09) | .02(-.04, .08) |
| gait-grip | nuage | grip | gait | 934 | -1.75( .40), <.01 \*\*\* | -.18( .04), <.01 \*\*\* | (-.27,-.10) | -.18(-.25,-.12) | -.04( .04), =.37 | -.10( .12), =.37 | (-.33, .12) | -.10(-.17,-.04) | -.13( .09), =.15 | -.04( .03), =.15 | (-.10, .02) | -.04(-.11, .02) |
| gait-grip | nuage | grip | tug | 934 | -7.37(1.16), <.01 \*\*\* | -.27( .04), <.01 \*\*\* | (-.35,-.19) | -.27(-.33,-.21) | -.17( .12), =.14 | -.26( .17), =.13 | (-.59, .07) | -.26(-.32,-.20) | -.10( .24), =.67 | -.01( .03), =.67 | (-.07, .04) | -.01(-.08, .05) |
| gait-grip | octo | grip | gait | 270 | -2.08( .95), =.03 \* | -.33( .14), =.02 \* | (-.61,-.05) | -.33(-.43,-.22) | -.01( .05), =.91 | -.04( .40), =.91 | (-.82, .74) | -.05(-.16, .07) | -.17( .25), =.50 | -.04( .07), =.50 | (-.18, .09) | -.05(-.16, .07) |
| pulmonary-gait | octo | pef | gait | 263 | -79.93(42.16), =.06 . | -.35( .17), =.04 \* | (-.69,-.02) | -.35(-.46,-.24) | -3.79(3.35), =.26 | -.58( .40), =.15 | (-1.37, .21) | -.58(-.66,-.50) | -3.43(14.41), =.81 | -.02( .09), =.81 | (-.21, .16) | -.02(-.14, .10) |
| pulmonary-grip | octo | grip | pef | 270 | 44.94(13.12), <.01 \*\*\* | .39( .10), <.01 \*\*\* | ( .19, .58) | .39( .28, .48) | .23( .27), =.40 | .34( .40), =.39 | (-.44,1.13) | .34( .23, .44) | 1.29(3.13), =.68 | .02( .06), =.68 | (-.09, .14) | .02(-.09, .14) |
| gait-grip | satsa | gait | grip | 366 | -1.06(2.67), =.69 | -.16( .42), =.69 | (-.99, .66) | -.16(-.26,-.06) | -.00( .02), =.96 | -.03( .59), =.96 | (-1.18,1.12) | -.03(-.13, .08) | -.08( .71), =.91 | -.01( .05), =.91 | (-.11, .09) | -.01(-.11, .10) |
| pulmonary-gait | satsa | gait | fev | 366 | -.24( .16), =.12 | -.38( .23), =.10 | (-.83, .08) | -.38(-.46,-.28) | -.00( .00), =.34 | -.38( .36), =.30 | (-1.08, .33) | --- | -.03( .04), =.46 | -.04( .06), =.46 | (-.16, .07) | -.04(-.14, .06) |
| pulmonary-grip | satsa | grip | fev | 408 | .06( .12), =.59 | .06( .11), =.58 | (-.15, .27) | .06(-.04, .15) | .00( .00), =.94 | .03( .35), =.94 | (-.67, .72) | --- | .17( .04), <.01 \*\*\* | .15( .04), <.01 \*\*\* | ( .08, .23) | .15( .06, .25) |

# Session Information

For the sake of documentation and reproducibility, the current report was rendered on a system using the following software.

Report rendered by koval\_000 at 2017-07-18, 15:29 -0400

R version 3.3.2 (2016-10-31)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows >= 8 x64 (build 9200)  
  
locale:  
[1] LC\_COLLATE=English\_United States.1252 LC\_CTYPE=English\_United States.1252 LC\_MONETARY=English\_United States.1252  
[4] LC\_NUMERIC=C LC\_TIME=English\_United States.1252   
  
attached base packages:  
[1] grid stats graphics grDevices utils datasets methods base   
  
other attached packages:  
[1] dplyr\_0.5.0 forestplot\_1.7 checkmate\_1.8.2 ggplot2\_2.2.1   
[5] knitr\_1.15.1 IalsaSynthesis\_0.1.8.9000 MplusAutomation\_0.6-4 magrittr\_1.5   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.9 plyr\_1.8.4 highr\_0.6 tools\_3.3.2 boot\_1.3-18 digest\_0.6.12   
 [7] jsonlite\_1.2 evaluate\_0.10 tibble\_1.2 gtable\_0.2.0 lattice\_0.20-34 texreg\_1.36.18   
[13] DBI\_0.5-1 yaml\_2.1.14 proto\_1.0.0 coda\_0.19-1 stringr\_1.1.0 htmlwidgets\_0.8   
[19] rprojroot\_1.2 DT\_0.2 R6\_2.2.0 plotrix\_3.6-4 gsubfn\_0.6-6 rmarkdown\_1.3   
[25] pander\_0.6.0 tidyr\_0.6.1 readr\_1.0.0 scales\_0.4.1 backports\_1.0.5 htmltools\_0.3.5   
[31] rsconnect\_0.7 assertthat\_0.1 testit\_0.6 xtable\_1.8-2 colorspace\_1.3-2 stringi\_1.1.2   
[37] lazyeval\_0.2.0 munsell\_0.4.3